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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------------|-------------|----------------------|-----------------------|------------------|
| 09/559,704 | 04/27/2000 | Michael D. Zoeckler | R029 1056 (7137-US) | 2557 |
| 26158 | 7590 | 01/11/2010 | EXAMINER | |
| WOMBLE CARLYLE SANDRIDGE & RICE, PLLC | | | HARMON, CHRISTOPHER R | |
| ATTN: PATENT DOCKETING | | | ART UNIT | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|----------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/559,704 | ZOECKLER, MICHAEL D. | |
| | Examiner | Art Unit | |
| | Christopher R. Harmon | 3721 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 05 January 2010.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-3,5-7,9-11,13-15,25-29,31-33 and 77-81 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-3,5-7,9-11,13-15,25-29,31-33 and 77-81 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. _____.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

1. In response to the Order by the BPAI of 1/5/10 the Examiner's Answer of 10/23/09 is vacated and the following Non-final action is taken in order to quickly resolve issues of contention as presented in the previous Appeal:

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3, 5-7, 11, 13, 25, 29, 31-33, and 77 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Walsh (US 5,746,871).

Walsh discloses a method for forming carton blanks with multiple panels including top, sides and bottom (see column 1, lines 45+) comprising advancing a web of paperboard 2 (with two surfaces) along a path; progressively applying and adhering at least a first and second ribbon of reinforcing material 6 (to a first inner surface) with a

width less than the paperboard to edge panel portions; the paperboard has longitudinally extending panel portions defined by fold lines 54 (formed on both sides of the web 2); see figures 2 and 5-6.

Carton blanks are cut from the laminated structure and later formed into a carton (score lines 54 are adjacent to edge of ribbon 6) to form individual carton blanks for receiving articles (see figures 1 and 2, column 1, lines 24-65). Because the layers are added thicknesses to an original web, the resulting structure is considered reinforced with the paperboard layer on the outside of the container (strips on the inside).

An additional ribbon 10 is applied to the composite layers in order to adhere/laminate the structure together forming a double thickness of reinforcement and the innermost layer; see figure 1.

The disclosure is not clear as to the exact positioning of the ribbons of reinforcing material with respect to fold lines 54. The figures and disclosure are considered to teach reinforcing both top and bottom panel portions which are defined by longitudinal fold lines 54 by ribbons 6. This would anticipate the claimed limitations as the ribbon 6 would coincide with the fold line 54 and therefore not extend beyond.

As previously argued, appellant takes the viewpoint that ribbon layer 6 extends beyond fold line 54, although this teaching is not supported by the reference. Walsh discloses modified cuts 52 which sometimes extend through ribbon layer 6 (see figures 5-7) however does not provide distinguishing reference numerals for the multiple panel portion cuts other than 52. Thus the examiner provides the following alternate rejection due to the obviousness of positioning reinforcing ribbons as desired:

It would have been obvious to one of ordinary skill in the art to position the reinforcing ribbons without extending beyond the longitudinal fold lines in order to reinforce the top and bottom panels without interfering with the folding procedure in constructing the completed carton.

Regarding claims 7 and 32, central ribbon 6 is considered overlying an intermediate panel portion as claimed and is applied in order to provide for two adjacent blanks after the cutting procedure, however note that the longitudinal fold lines 54 encompass either side of the are adhered to the opposing edges therefore overlie substantially but not beyond the intermediate panel portion; see figure 2.

5. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walsh (US 5,746,871) in view of Decottignies et al. (US 5,097,651).

Walsh does not directly disclose printing indicia on the ribbon, however Decottignies et al. teach printing indicia on reinforcing material 5 before adhesion to web 4. It would have been obvious to one of ordinary skill in the art at the time of the invention to include printing indicia as desired for product enhancement.

6. Claims 78-81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walsh (US 5,746,871) in view of Meyers (US 4,177,715).

Walsh does not directly disclose a third ribbon that is partially adhered to the web however Meyers teaches a process of manufacturing a reinforced paperboard container comprising partially adhering a third ribbon 54 of material to a continuous web 51 not overlying any longitudinal fold lines; see figures 1-3.

The third ribbon is partially adhered to the web 51 to a longitudinal fold line for folding the second unjoined portion into an internal divider for the container.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the process of partially adhering a ribbon as taught by Meyers in the invention to Walsh for providing for a box with an internal partition element as desired.

7. Claims 1-3, 5-7, 11, 13-15, 25-29, 31-33, and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over McNown (US 5,447,270) in view of Walsh (US 5,746,871).

McNow teaches manufacturing a paperboard carton with a reinforcing panel portions made of paperboard strips along score lines but not beyond as claimed in order to increase structural integrity; see figure 1c, col. 4, lines 42+.

McNow discusses placing reinforced linerboard on the inside of the box layer (col. 3, lines 24+); strip and patch laminations to selected areas of panels not crossing score lines; see col. 5, lines 29+, Table 3.

McNow does not directly describe the manner of construction of the laminated box blanks shown however Walsh discloses progressively advancing a web of paperboard 2 (with two surfaces) along a path; progressively applying and adhering at least a first and second ribbon of reinforcing material 6 (to a first inner surface) with a width less than the paperboard to completely cover edge panel portions; the paperboard has longitudinally extending panel portions defined by fold lines 54 (formed on both sides of the web 2); see figures 2 and 5-6. It would have been obvious to one of ordinary skill in

the art at the time of the invention to use the progressive lamination manufacturing techniques as taught by Walsh in the invention to McKnown in order to reinforce edge panel portions with a reduced amount of material and high structural integrity.

Due to arguments presented regarding Walsh not agreed with, ie. that flexible impervious material (Kraft paper, etc.) is not considered a reinforcing layer, the following alternate rejection is presented:

8. Claims 1-3, 5-7, 11, 13-15, 25-29, 31-33, and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over McNow (US 5,447,270) in view of Claff (US 2,008,608).

McNow provides for reinforced box blank construction, see above, however does not directly disclose the manner of blank production, however Claff discloses a method for forming carton blanks comprising advancing a continuous web of non-corrugated paperboard 1 along a path; progressively applying/laminating material (Kraft paper), with an adhesive, a plurality of ribbons of reinforcing material 2 with a width less than the paperboard substantially overlying substantially all of selected panel portions 3 (ie. portions to become panels in the final construction as interpreted by the Board of Patent Appeals); the paperboard is then scored and cut into individual carton blanks and then are formed into cartons for receiving articles (see figures 1-2 and 6-7).

Reinforcing strips 2 are progressively folded/sealed/adhered to opposed edge portions of the paperboard web 1; see figure 6 however are disclosed as extending beyond the bottom edge fold line; see column 2, lines 30-37.

McNown however in addition to directly reinforcing fold/score lines teaches aligning reinforcing strips along fold/score lines for reinforcing selected panel portions (including an intermediate); see figures 1a-1c. It would have been obvious to one of ordinary skill in the art at the time of the invention to include progressively applying laminating reinforcing strips as taught by Claff along the fold lines but not extending beyond in the invention to McNown in order to sufficiently increase the structural integrity with reduced cost.

Regarding claims 6 and 33, Claff teaches the possibility of further layer 14 to be added atop first and second reinforcing strips 2; see page 2, left column, lines 38+.

9. The previous rejections as presented in the Examiner's Answer have been maintained. Due to ongoing issues with regard to Walsh the examiner provides the above alternate rejections including McNown, as McNown clearly shows reinforcing longitudinal panel portions by reinforcing only adjacent portions of a score line. One of ordinary skill in the art at the time of the invention would have been able to use this teaching for the predictable outcome of reinforcing the selected portions as desired. Note that a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond that person's skill; see *KSR Int. v. Teleflex 550 US* (2007). Progressive application of reinforcing ribbons to a blank material with regard to selected portions thereof is considered within the skill of one of ordinary skill in the art.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Harmon whose telephone number is (571) 272-4461. The examiner can normally be reached on Monday-Friday from 8-5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher R Harmon/
Primary Examiner, Art Unit 3721